

Application No.: 09/954751

Case No.: 55814US004

Remarks

Claims 1 and 13 have, respectively, been amended to include the text shown on lines 9-12 of page 3 which defines a unitary brush as being

... comprised of a hub or body and bristles which are attached to the body or hub and are formed of the same mass of material as the hub or body without adhesive bonding or mechanical fastening of bristles to the hub or body...

Basis for this amendment, as indicated above, is provided on page 3 of the specification.

Claims 1 and 13, respectively, have also been amended to indicate that the "first coating" is a "first coating of adhesive." Basis for this amendment may be found in claim 2, which has been canceled without prejudice.

Thus, claims 1 and 3-16 are submitted for reconsideration.

Claims 14-16 have been withdrawn from consideration because of a restriction requirement. The Examiner is respectfully requested to rejoin claims 14-16 on indication of allowance of claims 1 and 3-13.

Claims 1-7, 9 and 10 were rejected under 35 USC § 102(b) as being clearly anticipated by Barber, Jr., et al. (US 5,518,794). The amendment should obviate this rejection since Barber, Jr., et al.'s invention deals with composite abrasive filaments which are incorporated into an abrasive brush, for example, as noted in column 21, lines 49-62.

The composite abrasive filaments of the invention can be incorporated into brushes of many types and for myriad uses, such as cleaning, deburring, radiusing, imparting decorative finishes onto metal, plastic, and glass substrates, and like uses. Brush types include wheel brushes, cylinder brushes (such as printed circuit cleaning brushes), mini-grinder brushes, floor scrubbing brushes, cup brushes, end brushes, flared cup end brushes, circular flared end cup brushes, coated cup and variable trim end brushes, encapsulated end brushes, pilot bonding brushes, tube brushes of various shapes, coil spring brushes, flue cleaning brushes, chimney and duct brushes, and the like. The filaments in any one brush can of course be the same or different.

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No mention is made in Barber, Jr., et al. of the type of unitary brush now defined in the claims of the present application.

In view of the above amendment and discussion, it is submitted that the anticipation rejection of claims 1-7, 9 and 10 under 35 USC § 102(b) is unwarranted and it should be withdrawn.

Claim 8 was rejected under 35 USC § 103(a) as being obvious over Barber, Jr., et al. ('794). It is submitted that this rejection is no longer appropriate in view of the amendment since Barber, Jr., et al. fails to disclose the type of brush now defined in Applicants' claim 1 from which claim 8 depends.

Claims 11-13 are rejected under 35 USC § 103(a) as being obvious over Barber, Jr., et al. ('794) in view of Johnson, et al. (US 5,679,067). It is submitted that one skilled in the art would not combine Barber, Jr., et al. ('794) with Johnson, et al. ('067) since Barber, Jr., et al.'s invention deals with conventional abrasive coated filaments which are incorporated into various conventional types of brushes, whereas Johnson, et al.'s invention deals with injection molded brushes which are formed in a mold by molding a moldable polymer which includes abrasive particles therein. Moreover, the combination fails to teach the invention as now defined in Applicants' claims 1 and 13 since the primary reference, Barber, Jr., et al., fails to disclose the type of brush now defined in claims 1 and 13.

While the application of the present invention is assigned to 3M Company, as is Barber, Jr., et al. and Johnson, et al., the inventions are patentably distinct from one another.

The Office Action indicates that Figure 8 of the '067 patent teaches that is old and well known to make a brush including a base and bristles by injection molding. This method of making is contrary to the presently claimed method since abrasive particles are contained within the polymeric material which would form the bristles, whereas the unitary brush of the present invention includes a coating of adhesive which includes adhered thereto abrasive particles. Thus, the two methods are completely different.

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In view of the above discussion, the obviousness rejection is inappropriate and the Examiner is respectfully requested to withdraw the rejection and allow the claims as amended.

Respectfully submitted,

Date

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